



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C07D 401/12, A61K 31/40, C07D 403/12, 209/18, 401/14, 471/08, 451/02, 451/04, 471/04, 471/18, 455/02		A1	(11) International Publication Number: WO 98/01443
(21) International Application Number: PCT/EP97/03577		(43) International Publication Date: 15 January 1998 (15.01.98)	
(22) International Filing Date: 3 July 1997 (03.07.97)		(74) Agent: RUTTER, Keith; SmithKline Beecham plc, Corporate Intellectual Property, Two New Horizons Court, Brentford, Middlesex TW8 9EP (GB).	
(30) Priority Data: 9614367.2 9 July 1996 (09.07.96) GB 9626697.8 23 December 1996 (23.12.96) GB 9626700.0 23 December 1996 (23.12.96) GB		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(71) Applicants (for all designated States except US): SMITHKLINE BEECHAM S.P.A. [IT/IT]; Via Zambetti, 1-20021 Baranzate di Bollate (IT), SMITHKLINE BEECHAM LABORATOIRES PHARMACEUTIQUES [FR/FR]; 6, esplanade Charles de Gaulle, F-92731 Nanterre Cedex (FR).		Published With international search report.	
(72) Inventors; and (75) Inventors/Applicants (for US only): FARINA, Carlo [IT/IT]; SmithKline Beecham S.p.A., Via Zambelletti, 1-20021 Baranzate di Bollate (IT). GAGLIARDI, Stefania [IT/IT]; SmithKline Beecham S.p.A., Via Zambelletti, 1-20021 Baranzate di Bollate (IT). NADLER, Guy, Marguerite, Marie, Gérard [FR/FR]; SmithKline Beecham Laboratoires Pharmaceutiques, Unité de Recherche, 4, rue du Chesnay-Beauregard, Boîte postale 58, F-35762 Saint-Grégoire Cedex (FR).			
(54) Title: INDOLE DERIVATIVES FOR THE TREATMENT OF OSTEOPOROSIS			
<div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;"> <p>(I)</p> </div> <div style="text-align: center;"> <p>(a)</p> </div> </div>			
(57) Abstract			
<p>A compound of formula (I), or a salt thereof, or a solvate thereof, wherein Ra represents a group R₅ which is hydrogen, alkyl or optionally substituted aryl and Rb represents a moiety of formula (a), wherein X represents a hydroxy or an alkoxy group wherein the alkyl group may be substituted or unsubstituted or X represents a group NR₆R₇, wherein R₆ and R₇ each independently represent hydrogen, alkyl, substituted alkyl, optionally substituted alkenyl, optionally substituted aryl, optionally substituted arylalkyl, an optionally substituted heterocyclic group or an optionally substituted heterocyclylalkyl group, or R₆ and R₇ together with the nitrogen to which they are attached form a heterocyclic group; R₁ represents an alkyl or a substituted or unsubstituted aryl group; and R₂, R₃ and R₄ each independently represent hydrogen, alkyl, aryl or substituted aryl; R₅ and R₇ each independently represent hydrogen, hydroxy, amino, alkoxy, optionally substituted alkoxy, optionally substituted benzyloxy, alkylamino, dialkylamino, halo, trifluoromethyl, trifluoromethoxy, nitro, alkyl, carboxy, carbalkoxy, carbanoyl, alkylcarbanoyl, or R₅ and R₇ together represent methylenedioxy, carbonyldioxy or carbonyldiamino; and R₆ represents hydrogen, hydroxy, alkynoyl, alkyl, aminoalkyl, hydroxyalkyl, carboxyalkyl, carbalkoxyalkyl, carbanoyl or aminosulphonyl; a process for preparing such a compound, a pharmaceutical composition containing such a compound and the use of such a compound in medicine.</p>			